

What is claimed is:

1. A network-based system for routing data between software applications with access to the network comprising:

5 at least one router connected to the network for establishing and maintaining routes between the router and the applications according to request;

 a first version of software residing in and executable from the at least one router for controlling route creation and deletion and converting
10 incoming data of differing markup languages into a common format;

 at least one client device connected to the network, the at least one device adapted for communication with the at least one router; and

 a second version of software residing in and executable from the at least one client device for determining how data sent to its host device is
15 rendered for use by the device;

 characterized in that data requested by the at least one client device is sent to the requesting device from the at least one router in the common format wherein the receiving device reads the data, builds an object model from logic instructions embedded in the data received and executes the
20 object model to implement the logic at the device for rendering the data.

2. The network-based system of claim 1 wherein the network is the Internet network.

25 3. The network-based system of claim 1 wherein the software applications comprise both network applications and client applications.

4. The network-based system of claim 3 wherein the software applications subscribe to data according to a shared topic.

5. The network-based system of claim 1 wherein the at least one client device is a mobile device connected to the network through a wireless network.

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6. The network-based system of claim 5 wherein in the case of more than one client device, the devices comprise a mix of different types and platforms.

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7. The network-based system of claim 1 wherein the second version of software is a distributed server application having full Web browser functionality.

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8. The network-based system of claim 1 wherein the logic instructions are JavaScript and the object model is an executable JavaScript object.

9. The network-based system of claim 1 wherein query applications developed using HTML and embedded JavaScript carry message data of the form of XML or SOAP.

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10. The network-based system of claim 1 wherein the common format is compact markup language.

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11. The network-based system of claim 1 wherein the message data comprising a response to a request is XML.

12. A server application distributed to a client device for enabling the client device to interact with an information and presence service hosted on a data-packet-network the application comprising:

a data-interpretation module for interpreting data sent to the device from the service and for creating an object model from any logic instructions embedded in the data;

a run-time engine for executing the created object model; and

5 a data-rendering module for applying the logic resulting from execution of the object model to the function and display devices supported on the client device;

characterized in that a user controlling the device may control how data is rendered in conjunction with the display and function attributes of the device through creation of unique query applications used by the device in requesting the data.

10 13. The server application of claim 12 wherein the data-packet-network is the Internet network.

15 14. The server application of claim 12 wherein message data is propagated between the service and the client device using the query application and response format.

20 15. The server application of claim 14 wherein the query applications contain logic instructions executed on the client side, the logic instructions developed by the client.

25 16. The server application of claim 12 wherein the query applications are developed using HTML and JavaScript.

17. The server application of claim 12 wherein the query applications contain differing logic instructions developed to render response data differently according to different data sources.

18. The server application of claim 12 wherein the client device is a mobile device connected to the network through a wireless network.

5 19. The server application of claim 12 wherein the application further comprises the necessary software to provide full Web browser functionality.

20. The server application of claim 12 wherein the object model is a JavaScript object and the run-time engine is a JavaScript run-time engine.

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21. The server application of claim 16 wherein the request message data is of the form of XML for SOAP.

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22. The server application of claim 12 wherein the data sent to the device is of the form of compact markup language.

23. The server application of claim 12 wherein the data-interpretation module decompresses the data before interpretation and object building.

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24. A method for client-side control of how data is rendered on a client device interacting with a Web based information and presence service comprising steps of:

(a) providing a server application capable of object modeling and object execution to reside and execute on the client device;

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(b) providing an HTML template and JavaScript library to the client for use in developing query applications that contain data rendering logic;

(c) developing a query application containing a message requesting data and logic instructions for data rendering;

(d) sending the query application to the information and presence service;

(e) receiving a response from the service, the response containing message data and the data rendering logic;

5 (f) interpreting the data response and building a JavaScript object representing the logic instructions; and

(e) executing the JavaScript object and applying the results to render the message data according to display and function of the device according to the logic instructions.

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25. The method of claim 24 wherein in step (a) the server application includes full Web browser functionality.

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26. The method of claim 24 wherein in step (a) the client device is a mobile device and connects to the service through a wireless network.

27. The method of claim 24 wherein in step (c) the message requesting data is of the form of XML or SOAP.

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28. The method of claim 24 wherein in step (d) the query application is specific to particular data source hosted by the service.

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29. The method of claim 24 wherein in step (e) the response is of the form of a compact markup language rendered from a traditional markup language.

30. The method of claim 24 wherein in step (e) the response is compressed for transport.

31. The method of claim 24 wherein in step (f) response is decompressed before interpretation.